Remarks:

In the Office Action dated October 24, 2007, claims 1-35 and 37-41 in the above-identified U.S. patent application were rejected. Applicants note that the Office Action indicates that claims 1-35 and 37-42 are rejected but previously, there were only 41 claims in the application. Reconsideration of the rejections is respectfully requested in view of the above amendments and the following remarks. Claims 21-35 and 37-41 remain in this application, claims 1-20 and 36 have been canceled and new claims 42 and 43 have been added to the application.

Claims 21-35 and 37-41 were rejected under 35 USC §112, first paragraph as including new matter regarding the language "wherein when a coating is used which does not dissolve during contact with the digestive solution in a patient's stomach, a pore forming agent is included with the coating to separate the coating from the core during contact with digestive solution in the patient's stomach". Support for this limitation can be found on page 7, lines 1-8, which indicates that "the use of film-forming agents usually employed in the production of gastric juice-resistant films is possible as long as pH-independently rapid release of the active substance from the appropriately coated administration form, as described above, is ensured, e.g., by a thin layer thickness of the coating or other measures such as an extremely high percentage of pore-forming agents or the like". Though the language is different, this disclosure clearly indicates that pore forming agents can be used in the coating when the coating is a gastric juice resistant film (i.e. does not dissolve

during contact with the digestive solution in a patient's stomach). In view of this disclosure, one skilled in the art would know that the purpose of the pore forming agent is to release the core during contact with digestive solution in the patient's stomach. Support for this limitation can also be found in originally filed claims 9 and 11. Applicants point out that the Board of Patent Appeals and Interferences interpreted the written description requirement in *Ex parte Holt*, 19 USPQ2d 1211 (Bd Pat App & Inter, 1991) and in *Ex parte Eggleston*, et al, Appeal No. 2003-2074. In *Holt*, the Board stated that "[i]t is well established that the invention claimed need not be described ipsis verbis in the specification in order to satisfy the disclosure requirements of 35 U.S.C. §112". In *Eggleston*, the Examiner contended that an explicit limitation in the claims was not present in the written description. The Board stated that explicit disclosure of the claimed term is not required under 35 U.S.C. §112, first paragraph. In view of the above discussion, applicants request that this rejection be withdrawn.

Claims 21-35 and 37-41 were rejected under 35 USC §112, first paragraph as failing to comply with the enablement requirement regarding the limitation "wherein 30% of the administered amount of ibandronate is released ... into the stomach...". The office action contends that the present claims do not indicate which pore formers are suitable, what concentration to use the pore formers in and which polymers can be used with which pore formers. Applicants respectfully point out that the claims indicate that when the recited gastric juice resistant coatings are used, a pore forming agent is also used. In addition, new claim 42 recites specific gastric juice resistant coatings. Since pore forming

agents are generally known in the art, one skilled in the art could determine suitable pore forming agents and concentrations using only routine experimentation. The present invention lies in the discovery that bone disease can be treated with ibandronate which is in an oral formulation and which is released in a patient's stomach to avoid irritations to the upper gastrointestinal tract but is still rapidly resorbed in sufficient amounts. The prior art uncoated formulations caused upper gastrointestinal irritations and the prior art coated formulations had reduced and/or variable resorption. The present inventors have found that both of these disadvantages can be avoided by using a coating that dissolves or is released from the core (e.g. by using pore forming agents) upon contact with the digestive solution in the patient's stomach. Applicants respectfully contend that only routine experimentation would be required to determine coatings and pore forming agents which dissolve or release the active agent in a patient's stomach since coatings and pore forming agents are known in the art. In a preferred embodiment of the present invention, the coating consists of methylhydroxypropylcellulose, poly(ethylacrylate, methylmethacrylate) i.e. Eudragit NE 30D, and in addition Macrogol 10,000, lactose monohydrate, polysorbat 80, sodium citrate, talcum, and titanium dioxide. The release of the active ingredient is essentially independent of the pH and accordingly, the release of the biphosphonate is also. The active ingredient is released at a pH from 1.2 to 5 in the stomach. The tablet is thinly coated with the above listed agents and excipients. The coating dissolves rapidly in water, independently of the pH and comprises in particular the water soluble, film forming agent

methylhydroxypropyl cellulose as well as the water soluble filler lactose monohydrate and Macrogol 10,000. These agents result in a slick film when in contact with water. Furthermore, the coating can also comprise, as a minor component, Eudragit,NE30D, which is an enteric coating but is a pH independent, neutral, permeable, swellable acrylate. This thin coat dissolves rapidly in water, independently of the pH. In the stomach, the water soluble major constituent methylhydroxypropylcellulose as well as lactose monohydrate readily dissolve and pores in the coating are formed. Water can then enter the tablet through these pores. Applicants contend that one skilled in the art could easily determine other coatings which dissolve or separate from the core when contacted with water as water soluble constituents such as methylhydroxypropylcellulose and lactose monohydrate are known in the art and can be included when gastric juice resistant coatings are used. Since coatings are known in the art and only routine experimentation would be required to determine appropriate combinations of coatings and pore forming agents (and concentrations thereof), applicants request that this rejection be withdrawn.

Applicants respectfully submit that all of claims 21-35 and 37-43 are now in condition for allowance. If it is believed that the application is not in condition for allowance, it is respectfully requested that the undersigned attorney be contacted at the telephone number below.

In the event this paper is not considered to be timely filed, the Applicant respectfully petitions for an appropriate extension of time. Any fee for such an extension together with any additional fees that may be due with respect to this paper, may be charged to Counsel's Deposit Account No. 02-2135.

Respectfully submitted,

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